

Claims.

1. Paper coating formulations for rotogravure printing processes containing:
 - a. 100 parts by weight of finely divided pigments;
 - b. from 0.001 to 5 parts by weight of one or more substances selected from the group consisting of: mono-alkylsulfosuccinate; di-alkylsulfosuccinates; sulfosuccinic acid mono-esters of ethoxylated and/or propoxylated fatty alcohols; sulfosuccinic acid di-esters of ethoxylated and/or propoxylated fatty alcohols;
 - c. from 3 to 15 parts by weight of a polymeric acrylic binder;
 - d. from 0.005 to 0.4 parts by weight of a dispersant.
2. Paper coating formulations for rotogravure printing processes according to claim 1 wherein the sulfosuccinic acid mono- and di-esters of ethoxylated and/or propoxylated fatty alcohols are ethoxylated and/or propoxylated with from 1 to 50 moles of oxide.
3. Paper coating formulations for rotogravure printing processes according to claim 2 wherein the sulfosuccinic acid mono- and di-esters of ethoxylated and/or propoxylated fatty alcohols are ethoxylated and/or propoxylated with from 20 to 40 moles of oxide.
4. Paper coating formulations for rotogravure printing processes according to any of the previous claims wherein the mono- and di- alkylsulfosuccinate are mono- or di- C_2 - C_{16} linear or branched alkylsulfosuccinates,
5. Paper coating formulations for rotogravure printing processes according to claim 4 wherein the di-alkylsulfosuccinate is dioctylsulfosuccinate.
6. Paper coating formulations for rotogravure printing processes according to any of the previous claims containing from 0.01 to 1 parts by weight of one or more substances selected from the group consisting of: mono-alkylsulfosuccinate; di-alkylsulfosuccinates; sulfosuccinic acid mono-esters of ethoxylated and/or propoxylated fatty alcohols; sulfosuccinic acid di-esters of ethoxylated and/or propoxylated fatty alcohols.
7. Paper coating formulations for rotogravure printing processes according to claim 6 containing from 0.02 to 0.8 parts by weight of one or more substances selected from the group consisting of: mono-alkylsulfosuccinate; di-alkylsulfosuccinates; sulfosuccinic acid mono-esters of ethoxylated and/or propoxylated fatty alcohols; sulfosuccinic acid di-esters of ethoxylated and/or propoxylated fatty alcohols.

8. Paper coating formulations for rotogravure printing processes according to any of the previous claims wherein the finely divided pigments have from 40 to 90% of the particles finer than 2 μ m,
9. Paper coating formulations for rotogravure printing processes according to any of the previous claims wherein the mixture of finely divided pigments preferably contains at least 30% by weight of kaolin for rotogravure printing having from 40 to 70% of the particles finer than 2 μ m.
10. Paper coating formulations for rotogravure printing processes according to any of the previous claims containing from 0.3 to 2 parts by weight of calcium stearate.
11. Aqueous dispersion for the coating of rotogravure printing paper containing from 40 to 70% by weight of one of the paper coating formulations according to claims 1-10 and from 30 to 60% by weight of water.
12. Paper for rotogravure printing processes characterised by the fact that it is coated with from 4 to 15 g/m² of a thin layer of the paper coating formulation of claims 1-10.
13. Paper for rotogravure printing processes according to claim 12, characterised by the fact that it is coated with from 6 to 10 g/m² of a thin layer of the paper coating formulation of claims 1-10.
14. Method to improve the printability of rotogravure paper comprising the step of treating the paper with a paper coating formulations containing:
 - a. 100 parts by weight of finely divided pigments;
 - b. from 0.001 to 5 parts by weight of one or more substances selected from the group consisting of: mono-alkylsulfosuccinate; di-alkylsulfosuccinates; sulfosuccinic acid mono-esters of ethoxylated and/or propoxylated fatty alcohols; sulfosuccinic acid di-esters of ethoxylated and/or propoxylated fatty alcohols;
 - c. from 3 to 15 parts by weight of a polymeric acrylic binder;
 - d. from 0.005 to 0.4 parts by weight of a dispersant.
15. Method to improve the printability of rotogravure paper according to claim 14, wherein the paper is coated with from 4 to 15 g/m² of the paper coating formulation.
16. Method to improve the printability of rotogravure paper comprising the step of treating the paper with an aqueous dispersion consisting of from 30 to 60% by

weight of water and from 40 to 70% by weight of a paper coating formulation containing

- a. 100 parts by weight of finely divided pigments;
- b. from 0.001 to 5 parts by weight of one or more substances selected from the group consisting of: mono-alkylsulfosuccinate; di-alkylsulfosuccinates; sulfosuccinic acid mono-esters of ethoxylated and/or propoxylated fatty alcohols; sulfosuccinic acid di-esters of ethoxylated and/or propoxylated fatty alcohols;
- c. from 3 to 15 parts by weight of a polymeric acrylic binder;
- d. from 0.005 to 0.4 parts by weight of a dispersant.